

## ABSTRACT

Intact living plants or plant parts are contacted with water to extract from the plant or plant part exuded chemical compounds, with the extracted chemical compounds subsequently being recovered from the water. The plant is treated with an elicitor or inducer to initiate or increase production of a chemical compound. The roots may be harvested for recovery of the chemical compounds. Valuable substances exuded from or onto a plant surface, such as a plant cuticle or the root of a plant, can be identified as biologically active. Libraries of substances exuded or secreted from various plant species can be elicited or induced to produce one or more of such substances.